

- 4 -

Docket: 0756-1146

In claim 21, line 3, please delete "non-single crystalline";

In claim 22, line 1, please delete "non-single crystalline";

In claim 23, line 1, please delete "non-single crystalline";

In claim 24, line 1, please delete "non-single crystalline";

In claim 25, lines 2, 4, 6, 10 and 11, please delete "non-single crystalline"; also in claim 25, lines 7 and 11, please delete "single crystalline";

#### REMARKS

The Examiner's Official Action dated August 19, 1996, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for a One Month Extension of Time* which extends that shortened statutory period of response to December 19, 1996. Accordingly, applicants respectfully submit that this response is being timely filed.

Claims 1-31 were pending in the above-noted application prior to this amendment. Claims 11, 12, 14, 15, 28 and 29 are cancelled without prejudice or disclaimer to applicants' right to file a divisional application with respect thereto. Claims 1, 7, 9, 10, 13, 16, 17, 19, 20, 21, 22, 23, 24 and 25 are amended by this response. Therefore, claims 1-7, 9-10, 13, 16-27 and 30-31 are now pending in the present application.

The present invention is generally directed to an electric device comprising an active matrix circuit, a driving means, a controller for controlling the driving means formed on a substrate.

- 5 -

Docket: 0756-1146

Referring to the Action, the specification is objected to for not providing support for the invention as claimed. Applicants have amended the claims by this response to delete "single crystalline" and "non-single crystalline" from the claims. Therefore, the claims as amended are supported by the specification and are believed to be allowable for the reasons advanced below.

Claims 1-10, 13, 16, 17-27, 30 and 31 are rejected under 35 U.S.C. § 112, first paragraph. These claims have been amended in order to overcome the objection to the specification. In view thereof, reconsideration is respectfully requested.

The Office Action rejects claims 14, 15 and 29 as anticipated by Spitzer '550. Applicants have cancelled claims 14, 15 and 29 by this response and respectfully submit that the rejections based on these claims are now moot.

In Paragraph 7 of the Action, claims 11, 12 and 28 are rejected under 35 U.S.C. § 103 as being unpatentable over Spitzer '550 in view of Mase '156. Applicants have also cancelled claims 11, 12 and 28 by this response and thus, the rejections are now moot.

Applicants believe that remaining claims 1-7, 9-10, 13, 16-27 and 30-31 of the present application are allowable over the cited art of record. In Paper No. 6, claims 1, 4, 5, 17 and 21 were rejected over Nagae '175 and claims 2, 3, 6-16, 18-20, and 22-25 were rejected over the combination of Nagae, Sarma '840 and Mase'156. However, the primary reference, Nagae, fails to teach a semiconductor integrated circuit chip for driving the thin film transistors of the driving means. The present invention resides in the use of both a semiconductor chip and thin film transistors on a same insulating

- 6 -

Docket: 0756-1146

substrate. By integrating the controller on the same substrate, information can be directly entered into the display system from a conventional personal computer, for example. Moreover, since the production yield of thin film transistors are low, it is advantageous to use a semiconductor chip rather than thin film transistors for constituting the control circuit in order to reduce the cost of the display device.

Although, Nagae appears to disclose the concept of integrating an active matrix circuit, a driver circuit and a control circuit on a same substrate, the reference does not teach how the control circuit is formed. Since Nagae uses a single crystal silicon wafer, it is natural to consider that the control circuit of Nagae is directly formed within the silicon wafer using a conventional IC process rather than using a COG process, as disclosed in the present invention. In addition, the present invention covers both a reflective type and transmission type display which is not disclosed or suggested in Nagae.

For this reason, applicants believe that the limitations of "single crystal" and "non-single crystal" were not necessary for overcoming the Nagae or any other cited reference. Therefore, the deletion of "single crystalline" and "non-single-crystalline" from the claims should not render the present claims obvious or anticipated by the references of record.

Applicants have rewritten claims 13 and 16 into independent form to include the limitations of cancelled independent claims 11 and 14, respectively, and respectfully request allowance of these claims.


For the reasons set forth above, applicants believe that claims 1-7, 9-10, 13, 16-27 and 30-31 are in proper condition for allowance. Reconsideration of the pending rejections is requested. If any further

- 7 -

Docket: 0756-1146

discussions about this case would be beneficial, the Examiner is invited to contact the undersigned.

Respectfully submitted,

  
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